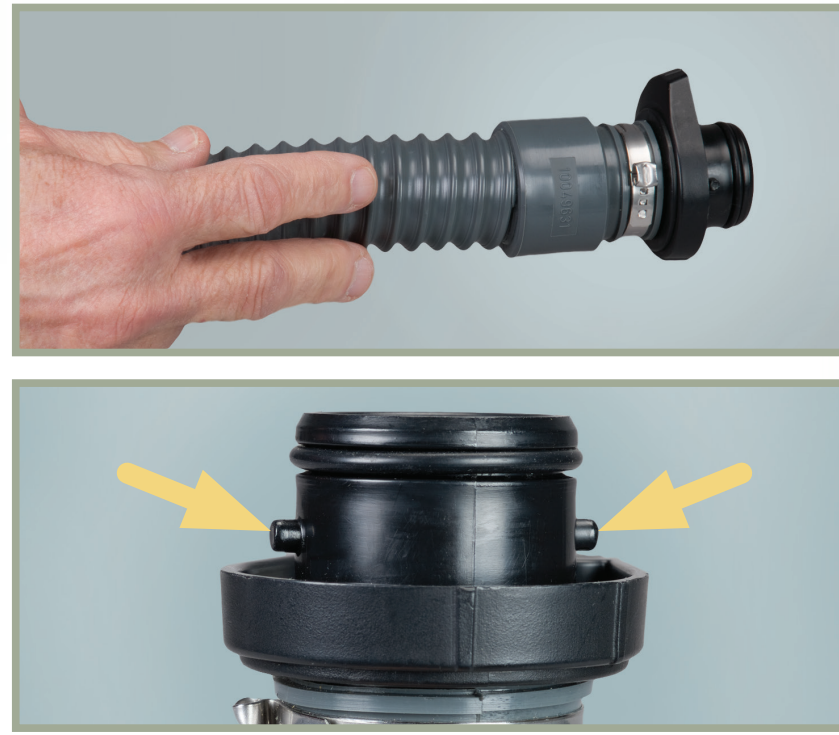


# Preparing the OptimAir® TL PAPR for Use with Hood



## Inspect and Install Battery

The kidney shaped battery can only be properly installed in one orientation. Slide the fixed tab end of the battery into the slot and push the contact end in until it snaps into place. Hear the click. The OptimAir TL PAPR will not operate properly if the battery is not installed correctly.



## Inspect Breathing Tube

Inspect breathing tube for cuts, punctures, and kinking. Inspect the two bayonet tabs for signs of excessive wear or distortion. If you notice any damage to these parts, replace them with new components.



## Inspect O-Ring

Inspect the o-ring in the breathing tube inlet. If the o-ring is damaged, missing, replace the o-ring. Reorder PN 10085084 (Pack of 10).



## Connect the Breathing Tube to Blower

Attach the breathing tube inlet to the blower outlet connection by aligning the marks on the bayonet fitting and turning the breathing tube to align the arrow on the unit to the second mark on the breathing tube. If the breathing tube is difficult to install, disconnect and re-inspect o-ring.

**Note: If the breathing tube is not installed or improperly installed, when the unit is powered up it will go into a Flow Fault Alarm.**



## Installing the Optional Protective Cover

Note: For use with decon waist belts only. DO NOT use the protective cover with the Comfort Belt.

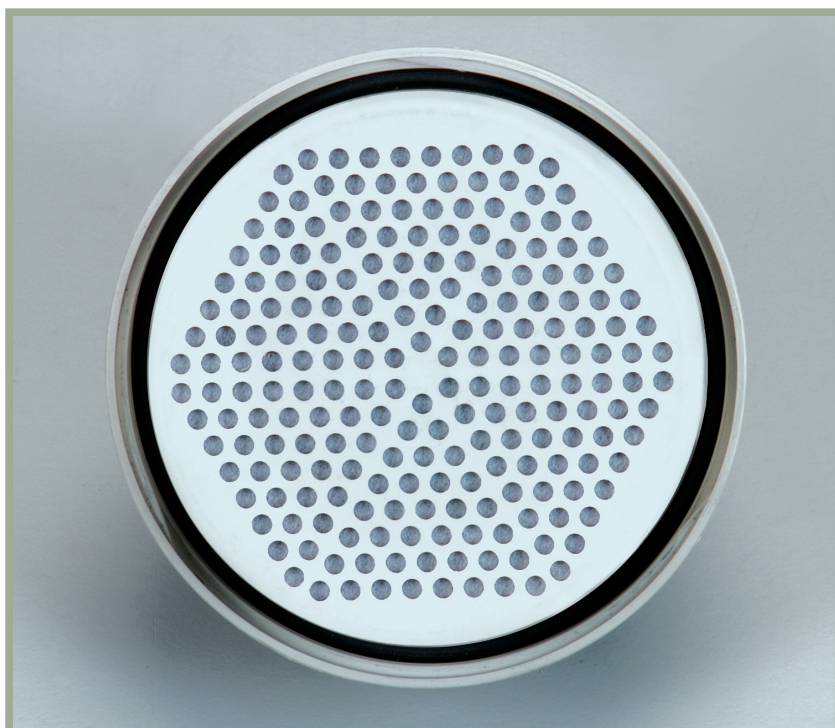
Slide the protective cover over breathing tube and motor blower unit. (It may be helpful to turn on the motor blower during this step.)

Push cover openings over cartridge receptacles.

Cut protective cover tube to desired length and seal to breathing tube connector with tape.

Thread decon belt through the slits in the protective cover and the loops on the blower assembly.

Fold and tape bottom of cover.



## Inspecting Cartridges

**Note:** Black lubricated gaskets are assembled into each OptimAir TL cartridge. Ensure the gaskets are installed before using the cartridges. Do not attempt to remove gaskets from cartridges, this could tear or damage the gasket.

Lubrication of the cartridge gasket is necessary to keep the gasket from drying out and cracking.



## Installing Cartridges

Place the unit on a flat surface with the cartridge receptacles facing up.

Set the cartridge in place on top of the cartridge receptacle.

Turn the cartridge counter-clockwise until it drops into position. Turn the filter clockwise until the cartridge is snug.

Hand-tighten only. If protective cover is used, tape cover openings to exterior of cartridge body ensuring cartridge inlets are not blocked.



## Remove the Gray Locking Nut and Install Rubber Washer

If threaded hood connection is used on full single or double bib hoods, remove the gray locking nut (shown above) that is screwed onto the end of the hose. It will not be needed for use with loose-fitting full hoods. This nut is used for attaching the hose to low profile hoods only.

**Note: The gray locking nut may be removed prior to issuance.**

Install the flat gray rubber washer provided onto the threaded end of the breathing tube.



## Inspecting the Hood and Hose Connection

Inspect the seam lines throughout the sewn areas including area around protective lenses.

Remove protective film from face shield carefully to avoid tearing sewn seams.

Inspect hood material for punctures, cuts, or other signs of damage.



## Using Full Hood With Locking Clamp Method

The breathing tube will be attached at the smooth, gray section at the end of the breathing tube. The gray locking nut is not needed.

Slide the breathing tube into the hose inlet on the back of the hood approximately 3 1/2 inches from the hose end.

Once the breathing tube is in position, place the locking clamp around the hood and breathing tube.

Tighten the locking clamp around the smooth gray section of the breathing tube.

Squeeze the locking clamp until it cannot be tightened further.



## Using the Full Hood with Threaded Connection

Connect the breathing tube to the hood by threading the breathing tube into the threaded hood connector.

Tighten the connection by turning the threaded hood connector nut with a ratcheting motion, releasing the threaded connector after each turn, until the connection is hand tight. Avoid twisting or kinking the hood by releasing the nut after each turn.

Adjust the orientation of the breathing tube so that it will not twist or kink the hood during use.

Inspect the threaded hood connector nut for ability to swivel and for damaged threads and perform a tug test on the breathing tube assembly (threaded hood connector nut) to ensure a secure attachment.



## Adjusting the Hood Suspension (if used)

Adjust the crown strap by undoing the Velcro material on the strap and reconnecting it either tighter or looser. Try on the suspension. If it still does not fit properly, readjust the strap.



## Adjusting the Hood Suspension (if used)

To loosen the headband squeeze the 1-Touch® buckle and slide the headband apart.

To tighten the headband, squeeze the two tabs together to slide the headband together.



## Placing Suspension into Hood

Spread the neck seal opening apart and put the suspension into the hood.

Line up the center suspension connector with the seam in the center of the hood. If necessary, look through the lens to align the parts.

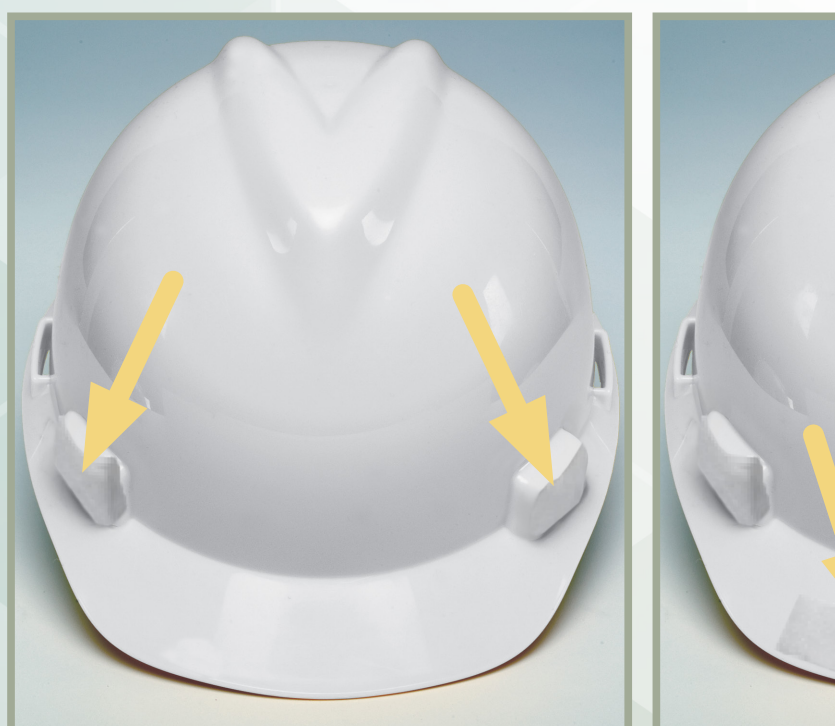
Push the suspension firmly into the hood to connect the Velcro attachments.



## Placing Suspension into Hood

Once the center suspension connector is in position, attach each side connection the same way. Push the suspension firmly into the hood to connect the Velcro attachments.

**Note: The 3-in-1 hood is approved to be worn with the hood suspension, with the MSA V-Gard hardhat or with the hood only (without suspension).**



## Donning the Hood with V-Gard® Cap (if used)

**Note:** The PAPR hoods may be used with the MSA V-Gard Cap as the suspension. The V-Gard Cap must be used with the OptimAir TL Hood with V-Gard Fastener Kit (P/N 10089665). Hard hats (helmets) of different MSA styles or any other manufacturer are not APPROVED.

Remove the standard suspension from the PAPR hood and set aside.

Locate the two flanges on the front of the V-Gard cap. Attach Velcro where shown (left).

Attach additional Velcro strips on front bill of cap as shown (right).

Place cap inside of hood and fasten with Velcro tabs.



## Operating the Blower

Turn the blower on by depressing and holding the ON/OFF button for 1-2 seconds (depressing the on/off button for longer may inadvertently turn the unit back off).

When the unit is turned on, listen for a series of beeps and observe that the LED lights on the unit illuminate. If the unit does not beep or the lights fail to illuminate, the unit should be checked by authorized personnel prior to use.

Wait four (4) minutes for the unit to complete a self diagnostic check ensuring that the unit has calibrated itself for optimum performance. During the four minute warm up period the unit maintains a 1000:1 APF.



## Flow Fault Alarms

indicative of the airflow generated by the blower. If the RPM is too low or too high the user is warned by an audible (single continuous beep) and RED INDICATOR fan pictogram visible alarm. The unit will continue to alarm until the issue is addressed or the unit is shut off.

The flow alarm may be triggered by a restriction in the flow path of the respirator system. Restrictions can be due to clogged filters, blockage of the cartridge inlets, or a restriction in the air inlet of a loose fitting hood. A flow alarm can also be caused by a hose connection that is not fully engaged or one that is installed incorrectly or twisting of the breathing tube canal. (i.e. twisting of the breathing tube channel/hood tail).



## Low Battery Alarms

### Battery Indicator (Audible and Visible Alarms)

The battery indicator will display the general state of the charge of the battery.

When the battery voltage drops below minimum allowable voltage, the OptimAir TL will notify the user with audible (double continuous beep) and flashing RED visible warning. The unit will continue to alarm for approximately 15 minutes or until it is shut off. After 15 minutes the unit will shut off to avoid over discharging and damage to the battery.

**Note:** The number of green LED lights illuminated does not indicate the amount of charge left in the battery. Example: If two lights are lit this does not necessarily mean there is only two-thirds life on the battery. The third green LED light will go out after 10-15 minutes indicating the battery is not fully topped off.